

Michigan Department of Licensing and Regulatory Affairs
Hand-held Portable Dental X-Ray Systems
Radiation Safety Section



As of December 5, 2007, Rule 396 became effective which allows the use of hand-held portable dental x-ray systems in the State of Michigan. This rule only allows the hand-held dental machine to be used for portable work where the patient's condition prevents transporting them to fixed radiographic facilities. **It cannot be used for routine dental radiography in dental offices.**

Some portable uses permitted with the hand-held unit would be:

- Use in nursing homes
- Home health care
- Special needs patients (individuals who require assistance for disabilities such as medical, mental, or psychological)
- Sedated patients who are unable to cooperate with the positional requirements of the radiograph

Training

To use the machine as a portable unit, each operator must complete the training program supplied by the manufacturer. Records of the training must be maintained on file. Department health physicists will ask to see the records of the training during our regulatory inspections.

Imaging

As of this date, the only hand-held unit we are aware of is battery-powered with lower than average tube potential and current. Because of the low power ratings of this unit, it requires a longer than average exposure time to produce an adequate image. **To reduce retakes due to image blurring from tube or patient motion, we recommend that the machine be used with E-speed or higher film or with a digital imaging system.**

Mounting Stand for In-Office Use

Those who would like to use the hand-held unit for portable use while also being able to utilize it in their office would need to provide a stand or a wall mount for the unit when used in the office. This would allow the operator to be at least 6 feet from the patient and the tube during the exposure. In this configuration, the machine meets the rules for the use of fixed, mounted dental x-ray tubes.